



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,577	01/23/2001	Norio Nagai	0905-0254P-SP	2339
2292	7590	02/21/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				MISLEH, JUSTIN P
ART UNIT		PAPER NUMBER		
		2612		

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/766,577	NAGAI, NORIO	
	Examiner	Art Unit	
	Justin P. Misleh	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 28 October 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1 - 10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1 - 10 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 23 January 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 28, 2005 has been entered.

Response to Arguments

2. Applicant's arguments filed October 28, 2005 have been fully considered but they are not persuasive.
3. Applicant primarily argues, "Okamura fails to disclose or suggest the 'light-emission control unit' as recited in claim 1." Applicant supports the arguments, "the claimed invention of the present application changes the light emitting angle of the strobe light-emission device based on an electronically magnified image rather than an optically enlarged image."

Applicant additionally argues, "Kowno fails to disclose or suggest the 'light-emission control unit' as recited in claim 1."

Applicant additionally argues, "Miyawaki fails to disclose or suggest the 'light-emission control unit' as recited in claim 1."

4. First, Applicant has clearly disregarded the Examiner's combination of Kowno et al. in view of Okamura in further view of Miyawaki et al. and has attacked each of the references

individually. In response thereto, Applicant is reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Second, Applicant interpretation of the rejection is erroneous. Okamura was provided by the Examiner to overcome a portion of the deficiencies of Kowno et al. In the Final Office Action, the Examiner admitted Kowno et al. does not specifically disclose changing a light emitting angle of a strobe light-emission device based on a designated zoom area. Okamura was relied upon to teach varying the illumination angle of a flash device in response to a designated zoom area and to teach said varying is performed after the image has been zoomed accordingly. The Examiner's assertion is clearly supported in figure 2 (Steps S104 and S105) and in column 3 (lines 55 – 67) of Okamura. On the other hand, Kowno et al., which is the primary reference, clearly teaches in figures 8 – 11, designating an electronic zoom area and electronically magnifying an image in the designated electronic zoom area.

Since the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, it is irrelevant whether or not the zooming performed by Okamura is an optical zoom or an electronic zoom. Thus, the Examiner respectfully disagrees with Applicant's position.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

Art Unit: 2612

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 3 and 8** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant is reminded “the test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.” (emphasis added) (see MPEP §2164.01)

In this case, one reasonably skilled in the art could not make or would know how to use, based upon the disclosure coupled with information known in the art, an “optic axis of the strobe light-emission unit [coincide] with a center point of [an] electronic zoom area.” Initially, the Examiner notes that information related to the “optic axis of the strobe light-emission unit” is only and briefly discussed in the *Disclosure of the Invention* section of the specification on page 4 (lines 1 – 9). Moreover, at that particular section, there was no indication as to what components are involved, whether the components are inherent to any strobe light-emission unit, or if the components must be specifically constructed or modified for Applicant’s system. Also there are no details in the specification of how the components, if any, should be interconnected, timed and controlled so as to obtain the specific operation (i.e., optic axis coinciding with zoom center) desired by the Applicant. An adequate disclosure of such a device should detail how necessary components are constructed and perform the desired function. (see MPEP §2164.06(a))

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 2, and 4 – 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowno et al. in view of Okamura in further view of Miyawaki et al.

Summary of Kowno et al.

Kowno et al. disclose, as stated in paragraphs 42, 56, 78, 81, 99, 157, 159, 162, 163, 170, 176, 184, and 185, an image sensing apparatus (1 – figures 1 – 4) comprising optical zooming (via the lens system 3 – figures 1 – 4) and electronic zooming (via CPU 39 – figure 4) wherein the zooming is actuated via a standard telephoto/wide angle switch (15 – figure 1) or via a user designation (see figures 8 – 11) on an display screen (via LCD 6 – figures 2 and 4). Kowno et al. also disclose that during image composition, when a preview image is displayed on the display screen (6), a user may operate the switch (15) or may designate, using the touch tablet (6A – figures 2 and 4), an area (via “a”, “b”, and “X” – figure 8) on the display screen (6) to perform zooming on the preview image (see transition from figures 8 → 9). According to Kowno et al., the zooming maybe strictly optical zooming by adjusting the focal length of a lens system (3 – paragraph 157), maybe strictly digital zooming by enlarging through interpolation (paragraph 157), or maybe a combination of optical zooming and digital zooming (paragraph 181). Lastly, Kowno et al. disclose a strobe/flash (4) for illuminating a scene, as necessary, during image composition (paragraph 42, 78, and 99).

9. For **Claims 1 and 2**, Kowno et al. disclose an image sensing apparatus (1) and a method of operating thereof comprising:

an image sensing device (CCD 20) for sensing the image of a subject and outputting image data representing the image of the subject;

a display control unit (CPU 39) for controlling a display unit (LCD 6) in such a manner that the image of the subject represented by the image data output from said image sensing device (CCD 20) will be displayed on a display screen (LCD 6);

a designating unit (Touch Tablet 6A) for designating an electronic zoom area (figures 8 and 9) in the image of the subject displayed on the display screen (LCD 6);

an electronic zoom device that electronically magnifies the image in the designated electronic zoom area (see figures 8 – 11);

a light-emission control unit (Strobe Driving Circuit 37) for controlling a strobe-light emission device (Strobe 4) in such a manner that a part of the subject that corresponds to an image within the electronic zoom area is illuminated with strobe light (see Examiner's interpretation below).

While Kowno et al. teach illuminating an entire sensed image, which fully encompasses illuminating a part of the subject that corresponds to an image within the electronic zoom area in the entire sensed image and a recording control unit (CPU 39) for recording, on a recording medium (Memory Card 24), an image that has been captured by the image sensing device (CCD 20) after the image has been composed; **Kowno et al. do not specifically disclose** recording on the recording medium image data output from said image sensing device AND data indicating position of the electronic zoom area OR image data representing the image with the electronic

zoom area and do not disclose wherein said light control unit changes a light emitting angle of the strobe light-emission device based on the electronically magnified image.

In regards to the light emitting angle and in analogous art, Okamura also disclose an image sensing apparatus and a method of operating thereof including designating a zoom feature. More specifically, Okamura teaches, as shown in figures 1 and 2 and as stated in columns 3 (lines 1 – 5, 34 – 45, and 62 – 67) and 4 (lines 1 – 20), an image sensing apparatus including a zoom switch (113) such that when the zoom switch (113) is operated, a zoom lens (102) is moved accordingly, wherein a flash control device (109), also included in the image sensing apparatus, controls an angle of illumination of the flash (110) to correspond to a zoomed sensed image. Moreover, Okamura “controls the illuminating angle of the flash device 110 according to the magnification varying information.” Therefore, Okamura provides said light control unit changing a light emitting angle of the strobe light-emission device based on the zoomed image, as claimed. The Examiner stresses since the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, it is irrelevant whether or not the zooming performed by Okamura is an optical zoom or an electronic zoom.

At the time the invention was made it would have been obvious to one with ordinary skill in the art to have changed a light emitting angle of the strobe light-emission device based on the electronically magnified image, as suggested by Okamura, in the image sensing apparatus and corresponding method, disclosed by Kowno et al., for the advantage of “taking a shot of an object with an adequate amount of exposure” (see column 1, lines 20 – 22, of Okamura).

In regards to the recording and in analogous art, Miyawaki et al. also disclose an image sensing apparatus for sensing an image of a subject and a designating unit for designating an

electronic zoom area in the image of the subject. More specifically, Miyawaki et al. teach, as shown in figures 11 – 13, an image sensing apparatus for sensing an image of a subject (101) and a designating unit (104) for designating an electronic zoom area in the image of the subject (see sequence in figure 12). Furthermore, Miyawaki et al. also teach, as shown in figure 14 and as stated in column 13 (lines 18 – 54), that an image corresponding to an image within the electronic zoom area (child image plane) and that the sensed image (total image plane) may be superimposed and recorded in a recording medium (103). Therefore, Miyawaki et al. provides recording on the recording medium (103) image data output from said image sensing device (total image plane) AND image data representing the image with the electronic zoom area (child image plane).

At the time the invention was made, it would have been obvious to one with ordinary skill in the art have recording on the recording medium image data output from said image sensing device and image data representing the image with the electronic zoom area, as taught by Miyawaki et al., in the image sensing apparatus, disclosed by Kowno et al., for the advantage of providing a user perspective on the accuracy of user instructed image composition (see column 14, lines 30 – 39, of Miyawaki et al.).

10. As for **Claim 4**, Kowno et al. disclose, as shown in figures 8 and 9, wherein the image comprises a marking that is displayed at a center point of the electronic zoom area (Marking “a”).

11. As for **Claim 5**, Kowno et al. disclose, as shown in figure 1, wherein said apparatus is a digital still camera.

Art Unit: 2612

12. As for **Claim 6**, Kowno et al. disclose, as stated in paragraph 185, wherein said designating unit is a zoom-area designating switch (15) of said digital still camera.
13. As for **Claim 7**, Kowno et al. disclose, as stated in paragraphs 50 and 157, wherein the electronic zoom device electronically magnifies the image in the designated zoom area by changing a downsampling ratio (“thinning”).

14. **Claims 9 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowno et al. in view of Okamura. The summary of Kowno et al. above is fully incorporated into these rejections.

15. For **Claim 9**, Kowno et al. disclose an image sensing apparatus (1) and a method of operating thereof comprising:

an image sensing device (CCD 20) for sensing the image of a subject and outputting image data representing the image of the subject;

a display control unit (CPU 39) for controlling a display unit (LCD 6) in such a manner that the image of the subject represented by the image data output from said image sensing device (CCD 20) will be displayed on a display screen (LCD 6);

an electronic zoom device that designates (Touch Tablet 6A) an electronic zoom area (figures 8 and 9) in the image of the subject and electronically magnifies the image in the designated electronic zoom area (see figures 8 – 11);

a light-emission control unit (Strobe Driving Circuit 37) for controlling a strobe-light emission device (Strobe 4) in such a manner that a part of the subject that corresponds to an

image within the electronic zoom area is illuminated with strobe light (see Examiner's interpretation below).

While Kowno et al. teach illuminating an entire sensed image, which fully encompasses illuminating a part of the subject that corresponds to an image within the electronic zoom area in the entire sensed image and a recording control unit (CPU 39) for recording, on a recording medium (Memory Card 24), an image that has been captured by the image sensing device (CCD 20) after the image has been composed; **Kowno et al. do not specifically disclose** wherein said light control unit controls a light emitting angle of the strobe light-emission device based on the electronically magnified image.

In analogous art, Okamura also disclose an image sensing apparatus and a method of operating thereof including designating a zoom feature. More specifically, Okamura teaches, as shown in figures 1 and 2 and as stated in columns 3 (lines 1 – 5, 34 – 45, and 62 – 67) and 4 (lines 1 – 20), an image sensing apparatus including a zoom switch (113) such that when the zoom switch (113) is operated, a zoom lens (102) is moved accordingly, wherein a flash control device (109), also included in the image sensing apparatus, controls an angle of illumination of the flash (110) to correspond to a zoomed sensed image. Moreover, Okamura "controls the illuminating angle of the flash device 110 according to the magnification varying information." Therefore, Okamura provides said light control unit changing a light emitting angle of the strobe light-emission device based on the zoomed image, as claimed. The Examiner stresses since the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, it is irrelevant whether or not the zooming performed by Okamura is an optical zoom or an electronic zoom.

At the time the invention was made it would have been obvious to one with ordinary skill in the art to have controlled a light emitting angle of the strobe light-emission device based on the electronically magnified image, as suggested by Okamura, in the image sensing apparatus and corresponding method, disclosed by Kowno et al., for the advantage of "taking a shot of an object with an adequate amount of exposure" (see column 1, lines 20 – 22, of Okamura).

16. As for **Claim 10**, Kowno et al. disclose, as stated in paragraphs 50 and 157, wherein the electronic zoom device electronically magnifies the image in the designated zoom area by changing a downsampling ratio ("thinning").

Cited Prior Art

17. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure for the following reasons:

- **JP 03042649 A** at least discloses that when an electronic flash is flashed to take a zoom picture through a photographing lens, the irradiation angle of the electronic flash is automatically set according to the pseudo focal length set by an electronic zoom, and an object equivalent to the trimmed scope of a film is suitably irradiated with stroboscopic light.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

Art Unit: 2612

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David L Ometz can be reached on 571.272.7593. The fax phone number for the organization where this application or proceeding is assigned is 571.273.3000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM

February 11, 2006



Examiner: Lin Ye
Technology Division 2622